



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

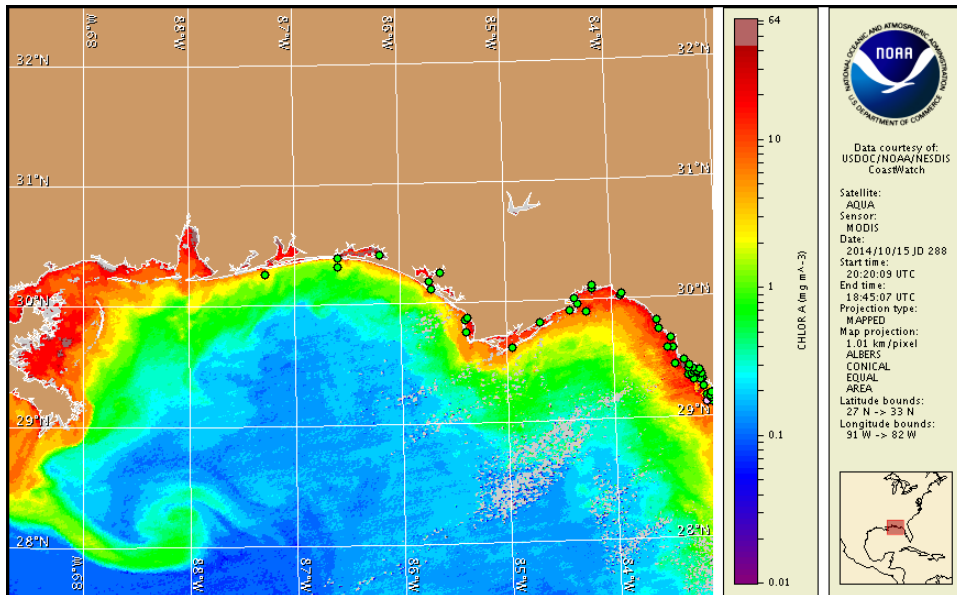
Thursday, 16 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 14, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 6 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Bay to Levy counties. No respiratory irritation is expected alongshore northwest Florida Thursday, October 16 through Monday, October 20.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Visit <http://tidesandcurrents.noaa.gov/hab/#swfl> for the most recent southwest Florida conditions report.

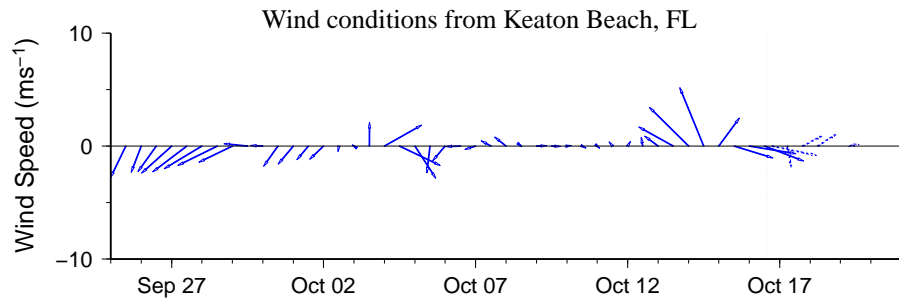
Analysis

Alongshore Franklin County, one sample collected on the gulf side of St. George Island State Park (not shown) indicated 'very low b' *Karenia brevis* concentrations (FWRI; 10/9). In Taylor County, recent samples collected this week northwest of Big Grass Island and 2.3 miles southeast of Little Grass Island indicate that *K. brevis* is not present (FWRI; 10/13). Bloom-level *K. brevis* concentrations have not been detected along- or offshore northwest Florida (Escambia to Taylor counties) since sampling on 9/29 detected 'low a' concentrations of *K. brevis* southwest of Big Grass Island in Taylor County (FWRI). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida (MML; 10/14-10/16). Reports of dead fish have been received from alongshore Franklin County over the past several days (MML; 10/14-10/16).

In MODIS Aqua imagery from 10/15 (shown left), patches of elevated to very high chlorophyll (2 to $>20\mu\text{g/L}$) are visible along- and offshore northwest Florida from Franklin to Taylor counties with anomalously high chlorophyll alongshore and extending up to 30 miles offshore. Patches of elevated chlorophyll ($2-8\mu\text{g/L}$) are visible along- and offshore northwest Florida from Escambia to Gulf counties with anomalously high chlorophyll alongshore and extending up to 10 miles offshore. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

West to northwest winds over the past several days may have promoted southerly transport of *K. brevis* concentrations. West to northwest winds forecasted tonight through Saturday may continue to promote southerly transport of *K. brevis* concentrations.

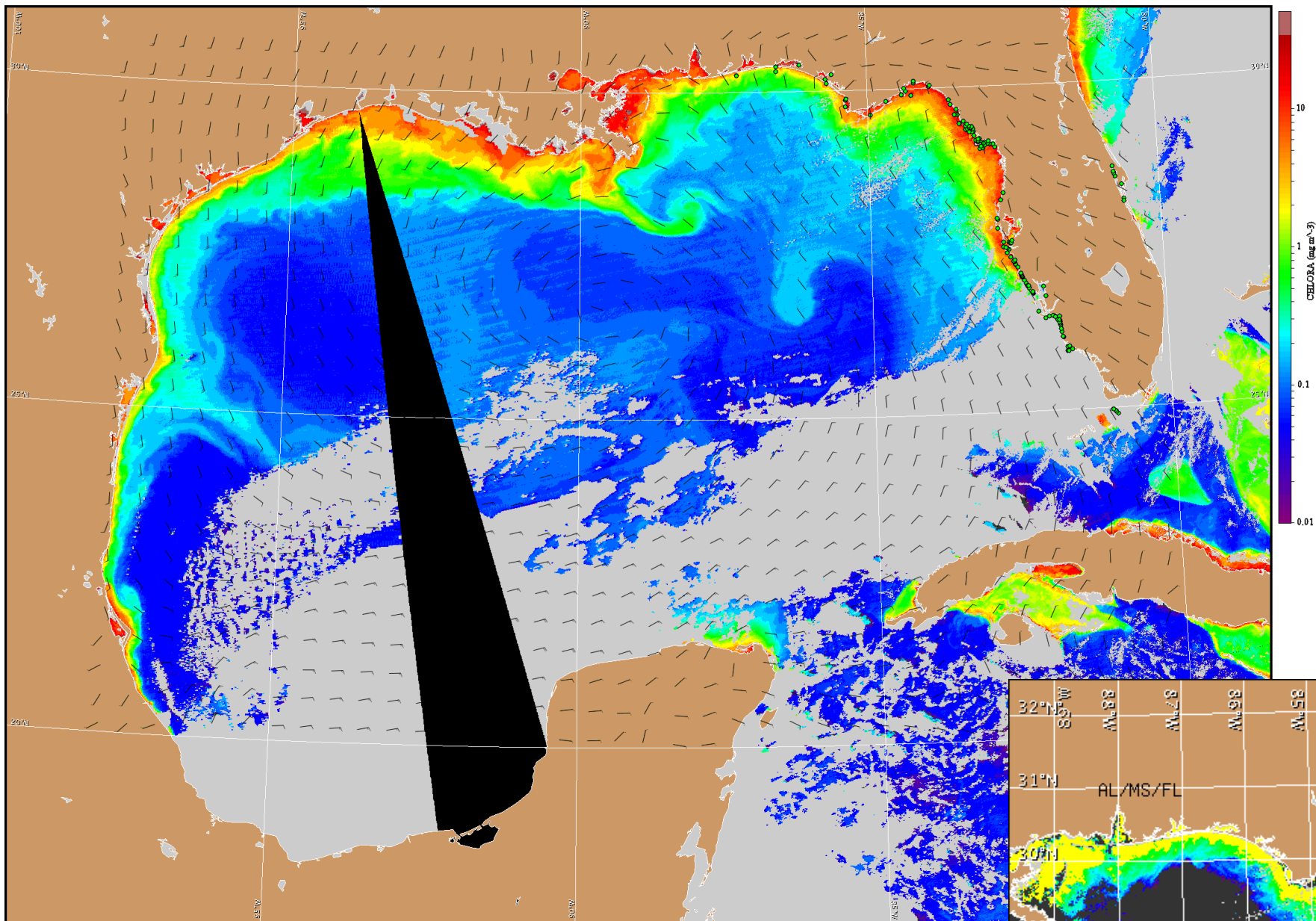
Davis, Urizar



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

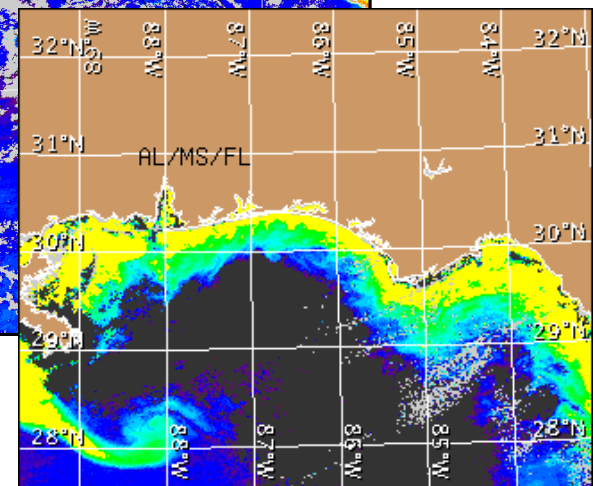
Wind Analysis

Escambia to Taylor counties: Northwest winds (10-15kn, 5-8m/s) today becoming north winds (5-10kn, 3-5m/s) tonight. North winds (10kn, 5m/s) Friday becoming west winds in the afternoon and evening. Northwest winds (10kn) Saturday. Northeast winds (10kn) Sunday. East winds (10kn) Monday.



Satellite chlorophyll image and forecast winds for October 17, 2014 06Z with points representing cell concentration sampling data from October 6 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).